

- Support in local planning processes/exercise including annual work plan
- Support Organizational/Business promotional aspects
- Support Productive End use promotion activities.
- Monitoring activities of local partner organization.
- Coordinate local and regional level energy related activities
- Coordinate with local government, financial institutions, and other relevant stakeholders

### Local Partner Organization

- Conducting feasibility study for IWM
- Procurement of IWM units from pre-qualified manufacturers
- Installation of units and providing after-sales services
- Motivation to Ghatta Owners for overall improvement of water mills
- Facilitate to link Ghatta Owners with MFIs for credit facility
- Technology dissemination
- Initiate the end use diversification
- Delivering regular reports and information to the programme units

### Manufacturers

- Standard kits are produced by pre-qualified manufacturers
- Quality control done by RSC
- of local partner organization will arrange to procure kits from them

### Ghatta Owners Association

- Work as vehicle for awareness campaign
- Work as pressure group for their rights
- Work as of local partner organization

### Subsidy Arrangements

Type of Improved Water Mill	Subsidy Amount in Rs		
	Category "A" VDCs	Category "B" VDCs	Category "C" VDCs
Short Shaft	20,000	18,000	16,000
Long Shaft	40,000	38,000	35,000

The subsidy for community owned improved water mills, if it is electrifying the villages will be as follows:

Subsidy Category	Subsidy Amount in Rs		
	Category "A" VDCs	Category "B" VDCs	Category "C" VDCs
Subsidy (per household)	8,000	7,000	6,000
Transportation subsidy per kW	20,000	10,000	5,000
But, the maximum subsidy amount per kW will not exceed Rs. 90,000, Rs. 80,000 and Rs. 70,000 in category "A", category "B" and category "C" VDCs respectively			

*For more information*

**Improved Water Mill Technology  
Community Electrification Sub-component  
National Rural and Renewable Energy  
Programme  
Alternative Energy Promotion Center**

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# IMPROVED WATER MILL TECHNOLOGY



Government of Nepal

**Alternative Energy Promotion Centre  
National Rural and Renewable Energy Programme  
Community Electrification Sub-component**

## Introduction

The Government of Nepal (GoN), in 1996, established an Alternative Energy Promotion Centre (AEPC) with the objective of developing and promoting alternative/renewable energy technologies with focus in rural area of Nepal. Since then, AEPC has implementing/executing the renewable energy programme/activities in Nepal, and has been actively promoting the use of these energy technologies through implementation of a number of programmes and projects. AEPC is executing a five years National Rural and Renewable Energy Programme (NRREP), which has a single programme modality. IWM technology is one of the technologies promoted under NRREP. Community Electrification Sub Component of NRREP implements the IWM technology.

## Objectives

- To improve the living standard of rural women and men,
- Increase employment of women and men as well as productivity
- Reduce dependency on traditional energy
- Attain sustainable development through integrating the alternative energy with the socioeconomic activities of women and men in rural communities.

## Period

From July 2012 to end of June 2017.

## Physical Target

4000 Improved Water Mill Technology with electrification and other end use diversification.

## Target Group

- Consist of millers in the hill and mountain areas of Nepal owning a traditional water mill.
- Indirectly, the programme addresses the agro-processing based micro-enterprises and

electrification needs of rural communities especially of the women that depend on the services of local water mills, kerosene and encroaching diesel mills.

## Programme area

Including all hill and mountain districts of Nepal.

## Supporting Agencies

- Government of Nepal
- Ministry of Foreign Affairs of Denmark
- Netherlands Development Organisation
- United Nations Development Programme
- Royal Norwegian Ministry of Foreign Affairs
- Kreditanstalt für Wiederaufbau Development Bank
- United Kingdom Department for International Development

## Programme Approaches

- Awareness creation regarding IWM technology through establishment of orientation & demonstration sites, documentary, radio programme and production and distribution of various information brochure and leaflets.
- Organizing Water Mill Owners by supporting them to create Ghatta Owners Group and ghatta Owners Association.
- Streamline the gender and social inclusion through IWM
- Establishment of quality management system
- Capacity building of local service providers
- Arrangement of subsidy from Central Renewable Energy Fund (CREF)
- Collaborate with local bodies, line agencies and other livelihood programmes for better synergy
- Follow-up and monitoring the installation and

programme activities

- Research and development for innovation

## Expected Results

- 4,000 IWM owners will increase their income from IWM by providing efficient services to rural community
- Drudgery on waiting time mainly of women of around 416,000 hours will be reduced.
- Around 16,000 ton of CO<sub>2</sub> emissions will be reduced from 4,000 IWM including end uses
- 4,000 IWM will be installed with a capacity to provide around 6 MW of clean energy
- Women and socially excluded strata will be capacitated through IWM training activities
- Generation of employment in rural areas
- Significantly increased sustainability of IWM sector as a result of improved institutional and local capability

## Stakeholders directly involved in the activities

Alternative Energy Promotion Center (AEPC)/ National Rural and Renewable Energy Programme (NRREP)

- Executes the activities
- Provides policy, coordination and monitoring support to execute the activities
- Act as implementing agency
- Monitoring/evaluates the programme activities

## Regional Service Center (RSC)

- Information dissemination, awareness creation and counseling